

THE APPLICATION OF REMOTELY SENSED DATA AND MODELS TO BENEFIT CONSERVATION AND RESTORATION ALONG THE NORTHERN GULF OF MEXICO COAST

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Keywords: Coast, Databases, Land Cover, Decision-making, Climate

New data, tools, and capabilities for decision making are significant needs in the northern Gulf of Mexico and other coastal areas. The goal of this project is to support NASA's Earth Science Mission Directorate and its Applied Science Program and the Gulf of Mexico Alliance by producing and providing NASA data and products that will benefit decision making by coastal resource managers and other end users in the Gulf region. Data and research products are being developed to assist coastal resource managers adapt and plan for changing conditions by evaluating how climate changes and urban expansion will impact land cover/land use (LCLU), hydrodynamics, water properties, and shallow water habitats; to identify priority areas for conservation and restoration; and to distribute datasets to end-users and facilitating user interaction with models. The proposed host sites for data products are NOAA's National Coastal Data Development Center Regional Ecosystem Data Management, and Mississippi-Alabama Habitat Database. Tools will be available on the Gulf of Mexico Regional Collaborative website with links to data portals to enable end users to employ models and datasets to develop and evaluate LCLU and climate scenarios of particular interest. These data will benefit the Mobile Bay National Estuary Program in ongoing efforts to protect and restore the Fish River watershed and around Weeks Bay National Estuarine Research Reserve. The usefulness of data products and tools will be demonstrated at an end-user workshop.